

tional procedure was required, it was done on the medial thigh.

To ascertain the effect of the procedure on lymphatic drainage, radioiodinated human serum albumin (RIHSA) clearance studies were made preoperatively and one month and one year postoperatively. In all seven patients RIHSA clearance values were significantly improved one year postoperatively.

These patients have been followed from three to four years postoperatively. Clinically, there was excellent control of symptoms in all patients, as well as reduction in size and return of normal function in the involved limbs.

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Hair Transplant Surgery

HAIR TRANSPLANTATION is a technique in which small plugs of hair-bearing tissue are transplanted into non hair-bearing areas, resulting in hair growth. While this is also applicable to coverage in scar alopecia, its most common use is for male pattern baldness. The success of the procedure depends on the fact that hair follicles moved from their original location on the body to another area will behave as they did in their natural site. In male pattern baldness, for example, a horse-shoe-shaped fringe of hair usually persists, and hair follicles moved from here to a bald area on the same patient's scalp will take root and grow.

In the procedure, the donor area is clipped and both the donor and recipient areas are anesthetized with a local anesthetic. A circular punch 4 to 5 mm in diameter is used to cut plugs of scalp in both areas. The hair-bearing plugs are placed in the punched-out sites on the bald scalp, while the donor area may or may not be sutured. The clipped area can usually be covered over completely by surrounding hair, so that the donor site does not show, even immediately after the procedure. The head is then bandaged appropriately.

A crust forms over each graft shortly after the procedure and remains attached for 10 to 20 days, after which it separates, leaving a pinkish spot. The clipped hairs in the transplants usually do not grow, but are shed between the second and fourth week after the procedure. A new generation of hair is seen at the surface usually during the twelfth week after transplantation, although up to twenty

weeks may be required. These hairs grow at the same rate as they did in their original location. The skin surface of the grafts usually blends in well with the surrounding scalp after a period of 3 to 4 months, although in some patients the grafts may be a shade lighter or slightly elevated. The number of transplant plugs which should be placed at each session and the frequency of transplant sessions depend on the characteristics of each individual case, although usually from 150 to 500 plugs may be required in stages of from 50 to 75 plugs each.

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Microvascular Replantation and Transplantation Surgery

EXPERIMENTAL WORK using animals during the late 1950's and early 1960's is beginning to bear clinical fruit in the field of replantation and microvascular transplantation surgery. Malt's first successful human extremity replantation in 1962 has been followed by numerous reports, particularly from China. Dr. Cheng Chung-Wei from the 6th Peoples Hospital in Shanghai speaks from an experience of over 250 digital replantations and over 100 extremity replantations.

The Chinese stress the importance of wide debridement of soft tissue and bone shortening in order to achieve primary nerve and vessel repair. With refrigeration of the part they have been able to replant extremities up to 33 hours after amputation. Postoperative heparin is used with digital replantations, but no anti-coagulants are used with higher amputations because of considerable blood loss. Although recovery may be prolonged after such procedures, the final result is considered worthwhile if the replanted part functions better than a prosthetic device.

It seems logical that replantation centers should be organized regionally in this country to handle these uncommon but often devastating injuries.

The elective transplantation of large flaps by microvascular anastomosis has reached a high level of perfection in Japan. Dr. Harri of Tokyo has used over 80 such transplants instead of the classic tube pedicles or flaps to reconstruct ex-